UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,074	10/27/2003	Nathan R. Belk	073671.0183	3795

5073 7590 06/01/2009

BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER	
YENKE, BRIAN P	

ART UNIT	PAPER NUMBER
2622	

NOTIFICATION DATE	DELIVERY MODE
06/01/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptomail1@bakerbotts.com
glenda.orrantia@bakerbotts.com

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/694,074
Filing Date: October 27, 2003
Appellant(s): BELK, NATHAN R.

Samir A. Bhavsar
Reg. No. 41,617
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 01/09/09 appealing from the Office action mailed 08/13/2008.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief contained in the brief is correct.

(2) Related Appeals and Interferences

A statement identifying that no related appeals or interference contained in the brief is correct.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments

All amendments have been entered.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Grounds of Rejection To Be Reviewed On Appeal

The appellant's statement on the grounds of the rejection in the brief is correct.

(7) Claims 1-17 (Appendix)

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

Birleson et al.,	US 6,177,964	23 Jan 2001
Fulga et al.,	US 7,196,737	27 Mar 2007

(9) Grounds of Rejection

Claim Rejections - 35 USC § 103

Claims 1-8, 10-11 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birleson et al., US 6,177,964 in view of Fulga et al., US 7,196,737.

In considering claims 1, 8, 11 and 26,

Birleson discloses a single integrated tuner circuit, which includes a filter 101, filter 109 and filter 113 being part of the tuning circuit (Fig 1). It is noted regarding the dissipating the undesired channels from being sent to the transmitter is a function of placing the filter on the tuner chip—which is stated in the appellant's specification. Birleson discloses that filter 101 in the invention is used to retrieve all TV signals wherein Prior Art the use of a filter to filter some of the channels is traditionally used (col 7, line 56-61). Thus, by simply replacing the filter 101 of Birleson with the conventional filter, would render obvious the pending claims. The use of a filter to receive more frequencies/channels or less frequencies/channels are obvious modifications to one of ordinary skill in the art (as evidenced by the prior art) and thus are not patentable.

The examiner has incorporated Fulga, US 7,196,737 which discloses that in prior art (Fig 1) it was known to utilize in a system a prefilter (101 Fig 1) which received a 1st number of channels and provided a few channels to the tuner 140. It is also a general principle that the lesser number of channels (which correlates to a smaller frequency band) also reduces the susceptibility/problems with spurious noise from unwanted channels/bands. It also appears that Fulga's description of the Prior Art (Fig 1) pertains to the previously cited Birleson reference as used herein.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Birleson which discloses a single integrated tuner circuit, by recognizing that a prefilter could be used to limit the number of channels/frequencies entering the tuner circuit as disclosed by Fulga for the known advantages as stated above.

In considering claim 2,

Although the combination of Birleson/Fulga may not explicitly recite the number of channels of the 1st/2nd/3rd as claimed, the concept of filtering/tuning down the number of channels received has been evidenced above, and the specific number of such is not considered patentable since the result is predictable (i.e. no unexpected results are derived from a filter design to filter out a select band of channels).

In considering claims 3-6,

Birleson/Fulga discloses the reception of over the air and cable broadcast, which meets the plurality of bands of channels, wherein conventional UHF/VHF systems provide the switching being bands of channels, including a plurality of capacitors/inductor as claimed, thus the examiner takes "OFFICIAL NOTICE" regarding such, in the event the appellant disagrees/traverses such notice, the examiner notes appellant's cited EP-1345324.

In considering claims 7 and 27,

Birleson discloses receiving a TV signal in the frequency range of 55MHz-806Mhz which is in the range as claimed (48Mhz-852Mhz).

In considering claim 10,

Birleson does not explicitly recite the use of a LPF, however the use of such in order to attenuate a frequency range are conventional in the art, by the very definition of such filters, thus the examiner takes "OFFICIAL NOTICE" regarding a LPF being used on an input signal.

(10) Response to Arguments

Appellant's Arguments

a) Appellant states that the Birleson-Fulga combination is improper since they teach away from the invention as claimed. Appellant states that Birleson explicitly teaches away from a "filter operable to receive an input signal comprising a first number of television channels and further operable to communicate an intermediate output signal comprising a second number of television channels less than the first number of television channels." Appellant states that a person of ordinary skill in the art would not

implement this variation of Birleson because Birleson explicitly rejects this modification for being a source of error and discloses "filter 101 passes all channels in the television band.

b) Appellant states the application of the test recited in KSR leads a conclusion contrary to that recited by the Examiner.

c) Appellant argues that Birleson describes discrete components including filters, thus cannot meet the claimed "at least a portion of the filter is formed on an integrated circuit." Appellant states that discrete components are comprised of a one circuit element, unlike integrated circuits, which combine several elements in one package.

Examiner's Response

a) The examiner disagrees. Initially it should be noted that Birleson (same assignee as appellant) discloses the use of prefilters which were located as off-chip devices, these prefilters were not included onto the Tuner Integrated Circuit, and thus not required since Birleson invented an Integrated Tuner circuit which could receive all TV channels (i.e. "all pass filter"). It is also noted that Birleson disclosed the use of an "analog" tuner circuit. Fulga, US 7,196,737 discloses in the background (Fig 1 "Prior Art) receiving (via filter 101) the same channel band of frequencies (55-806MHz) as Birleson (Fig 1, which provides an all pass filter 101 for those frequencies), however in Fulgas background description such channel frequencies are filtered.

The examiner also notes that original claims as filed, recited channels (they were subsequently amended to television channels in lieu of examiner's rejection), and as the examiner pointed out during prosecution (see Final Rejection, 12/18/07, page 2, Examiner Response b)). The system of Birleson (which described an all pass filter for the frequency band 55-806MHz would in fact require some filtering to eliminate/filter such non-TV signals/channels such as fixed mobile, radio astronomy, FM radio etc... To expand the same analysis with respect to filtering only TV channels, whether being grouped by numbers (4-10, 20-29 etc...), UHF/VHF, or digital channels (which may provide the user 6 channels for every 1 analog channel) all pose as selective groups to select/filter/prefilter in

order to reduce the number of channels being received by an all TV pass filter, which would directly reduce the amount of noise within the tuner circuit. This would most certainly enhance the functionality of Birleson whose invention was to provide an integrated TV tuner circuit.

b) The examiner disagrees. The appellant repeats the argument that since Birleson includes an all pass TV tuner integrated circuit, it would defeat the intended purpose of Birleson to filter/prefilter any TV channel. The examiner does not agree with this argument as stated above (see examiner's response a) above). The examiner reiterates that Birleson's integrated TV circuit, eliminated the use of an external prefilter located off-chip, thus in modifying Birleson by place a filter on chip, this would enhance, not detract from Birleson's intended purpose/function of a single integrated circuit which could receive TV channels.

c) The examiner agrees that in the "non-preferred embodiment" that Birleson discloses discrete components, though in the preferred embodiment Birleson explicitly discloses "In a preferred embodiment...invention would be constructed entirely on a single integrated substrate. However, design, manufacture and cost considerations may require that certain elements be embodied as discrete off-chip devices" (col 4, line 36-40). Thus the appellants claim that "at least a portion...formed on an integrated circuit" is clearly met by the prior art, since Birleson discloses it may be preferably on the same integrated circuit substrate or alternatively discrete components may also be used.

(11) Related Proceeding Appendix

The appellant's statement that there are no related proceeding is correct.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/BRIAN P. YENKE/
Primary Examiner, Art Unit 2622

/BPY/

21 May 2009

Conferees:

/David Ometz/
David Ometz (SPE)
Supervisory Patent Examiner, Art Unit 2622

/Victor R. Kostak/
Victor Kostak
Primary Examiner, Art Unit 2622